REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 1-19 are pending.

I. Rejection under 35 U.S.C. § 103

In the Office Action, at page 2, numbered paragraph 4, claims 4, 5, 7-13, 15 and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,926,381 to Hanabusa et al. in view of U.S. Patent No. 6,314,252 to Matsumoto. This rejection is respectfully traversed because the combination of the teachings of Hanabusa and Matsumoto does not suggest:

> storing information via a storage unit regarding sheet sizes of a sheet of paper and information in relation to position of the sheet of paper at which a white line would be produced;...
>
> detecting whether the sheet reaches a set reference position; and
>
> upon detecting that the sheet has reached the set reference position, controlling a sheet feeding rate by using the information in relation to a position of the sheet at which the white line would be produced depending on the sheet size information,

as recited in independent claim 4.

According to a non-limiting example, the present invention of claim 4, for example, detects whether a sheet reaches a set reference position by using a document position sensor 262. The control unit 280 uses the size information regarding the sheet size to recognize a position of the sheet of paper at which a white line would be produced and processes the sheet of paper P to be fed at a different rate than an initial feeding rate starting from the time when the white line would be produced.

Hanabusa discusses determining, in a printer, whether a current line is white data, and if the current line of data is determined to be all white, then a line counter value is incremented to account for the white space line. Once a line of black data is encountered, then a skip amount is calculated, which determines how many lines the paper is to be fed to account for the white space.

First, Hanabusa fails to discuss or suggest storing information in relation to a **position** of the sheet of paper at which a white line would be produced. Hanabusa discusses only determining whether a current line is white data, but Hanabusa, particularly at cited col. 16, lines

38-48 does not suggest that information in relation to the position of the sheet of paper at which a white line **would be** produced is stored.

Further, Hanabusa does not discuss or suggest detecting whether the sheet reaches a set reference position. Hanabusa discusses only, at Fig. 17, operation S1707, determining whether a current line is white data. Hanabusa does not, however, include any indication that a sheet is measured or a sheet position is detected by a sensor or other detecting device such that it may be detected whether the sheet reaches a set reference position. Merely determining whether a current line is white data is not detecting whether the sheet reaches a set reference position.

In addition, Hanabusa does not discuss or suggest controlling a sheet feeding rate by using the information in relation to a position of the sheet at which the white line would be produced depending on the sheet size information upon detecting that the sheet has reached the set reference position. Hanabusa discusses calculating a skip amount, which determines how many lines the paper is to be fed to account for white space and then the line feed motor advances the paper those amount of lines. Hanabusa does not discuss controlling a sheet feeding rate by using information in relation **to a position of the sheet at which the white line would be produced *depending on the sheet size information* and upon *detecting that the sheet has reached the set reference position***.

Hanabusa merely discusses determining how many lines the line feed motor will advance the paper due to a white space, but does not suggest that a sheet feeding rate is controlled or that the rate is controlled by using information of a position of the sheet which a white line would be produced. Further, as Hanabusa is silent as to determining sheet size information and detecting that the sheet has reached a set reference position, Hanabusa is not suggestive of controlling a sheet feeding rate by using information in relation to the position of the sheet at which the white line would be produced, which is dependent on sheet size information, and after detecting that the sheet has reached the set reference position.

In addition, as conceded by the Examiner, Hanabusa does not suggest storing information via a storage unit regarding sheet sizes of a sheet of paper, but indicates that Matsumoto makes up for the deficiencies in Hanabusa. The Applicants respectfully disagree.

Matsumoto discusses an image forming apparatus in which a sheet size of a sheet is stored.

Matsumoto does not discuss or suggest controlling a sheet feeding rate by using the information in relation to a position of the sheet at which the white line would be produced depending on the sheet size information. Further, the Examiner merely alleges that combining Hanabusa and Matsumoto would have been obvious in order "to control the feeding rate of the recording medium for increased throughput without sacrificing print quality." The Examiner's cited motivation provides **no indication** as to how or why the sheet storage of Matsumoto would be incorporated into the apparatus of Hanabusa, particularly as it relates to Hanabusa's white space. The cited "motivation" does not suggest controlling a **sheet feeding rate**, and the Examiner has provided no indication as to why the sheet size of Matsumoto would relate to a sheet feeding rate or to the feed line advancement of Hanabusa.

Further, the "motivation" does not suggest how one of **ordinary skill in the art** would have been led to combine Hanabusa and Matsumoto to suggest controlling a sheet feeding rate by using the information in relation to a position of the sheet at which the white line would be produced depending on the sheet size information because there is no indication that a position at which a white line would be produced is or would be dependent on the stored sheet size of Matsumoto. The motivation gives no indication as to why or how the sheet size relates to anything in Hanabusa.

Therefore, as the combination of the teachings of Hanabusa and Matsumoto does not suggest "storing information via a storage unit regarding sheet sizes of a sheet of paper and information in relation to position of the sheet of paper at which a white line would be produced;...detecting whether the sheet reaches a set reference position; and upon detecting that the sheet has reached the set reference position, controlling a sheet feeding rate by using the information in relation to a position of the sheet at which the white line would be produced depending on the sheet size information," as recited in independent claim 4, claim 4 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Further, the combination of the teachings of Hanabusa and Matsumoto does not suggest "a storage unit to store information in relation to a position at which a white line would be produced **in accordance with the size of a sheet of paper**;...[and] a control unit to check if information regarding the size of the sheet queuing to print is input through the input part, and upon determining that information on the size of the sheet is input, the control unit uses the size information to recognize a position of the sheet at which a white line would be produced," as

recited in independent claim 8. Therefore, claim 8 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Claims 5, 7, 9-13, 15 and 16 depend either directly or indirectly from independent claims 4 and 8 and include all the features of their respective independent claims, plus additional features that are not discussed or suggested by the references relied upon. For example, claim 5 recites that "the control operation stops driving the feeding rollers for a predetermined period of time starting from the time when the white line would be produced on the sheet." Therefore, claims 5, 7, 9-13, 15 and 16 patentably distinguish over the references relied upon for at least the reasons noted above. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

II. Allowable Subject Matter

Applicants are appreciative of the indication that claims 1-3 and 17-19 have been allowed. Applicants are further appreciative of the indication that claims 6 and 14, which are objected to as being dependent upon rejected base claims, would be allowable if rewritten in independent form. Claims 6 and 14 have not been rewritten in independent form as it is believed that independent claims 4 and 8, from which claims 6 and 14 ultimately depend, are allowable over the references relied upon.

Conclusion

In accordance with the foregoing, claims 1-19 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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